8.0 Chargeback Services Requirements

Requirements: *Vendor shall address in its proposal the solution it proposes to the Commonwealth's Chargeback System and Chargeback Services Requirements. The Commonwealth shall submit to Vendor additional instructions and documentation of such requirements shortly after this release of the initial Detailed Package documents.*

8.1 Chargeback Services Overview and Objectives

Overview

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Services Objectives

The following are the key high-level objectives Northrop Grumman shall ensure that the chargeback services will achieve:

Phase One Objectives: ***(Starting at Service Commencement Date – Chargeback System Deployment)***

- Ongoing management and support for VITA's current internal billing and chargeback systems to ensure no disruption of bill presentation services to Eligible Customers
- Accurate and timely presentation of chargeback invoices to Eligible Customers

Phase Two Objectives: ***(Starting at Project Month 15)***

This phase addresses the deployment and management of a consolidated and integrated billing and chargeback system to replace the existing VITA systems. This new Chargeback system will optimize the delivery and management of the chargeback and bill presentation processes, providing an end-to-end enterprise view, which will:

- Replace the invoicing systems currently in use
- Collect and process resource usage data from a variety of systems platforms
- Store chargeback data
- Provide drill down capabilities to Eligible Customers from the reports
- Provide historical data to VITA for research and analysis
- Provide resource usage and accounting for all appropriate Commonwealth Systems technologies, using cost-effective methods
- Accept input from external sources to be included in a single database for processing and producing invoices, which can be generated and presented in both online and in hard-copy formats
- Accommodate special Eligible Customer requests for extracted information (e.g., extract files for the eligible customer to retrieve or create files to FTP to the eligible customer)
- Provide the ability to interface with other business systems to bring information in and to pass information out (e.g., telecommunication billing, manpower information, PeopleSoft Account Receivable, VITA's planning and forecasting systems)

8.2 Service Environment

Scope of the Infrastructure to be supported

This section describes the assets, personnel, policies and procedures, and current projects that will be part of the overall Chargeback infrastructure and development process.

Hardware and Software

- Northrop Grumman's Chargeback system will support at a minimum the list of existing hardware provided in Addendum 1 to Appendix 7 to Schedule 3.3 to the Agreement.
- Northrop Grumman's Chargeback system will support at a minimum the list of existing software and utilities provided in (i) Addenda 2 and 4 to Appendix 7 of Schedule 3.3, of the Agreement, and (ii) Schedule 28.18 of the Agreement.

Personnel

The Northrop Grumman Team has the people, technical expertise, commercial chargeback product awareness and a design methodology to successfully define, develop and deploy the Chargeback system that VITA requires.

The Northrop Grumman Team will be responsible for providing qualified, appropriately skilled staff with applicable certifications, clearances, and background checks as appropriate, to meet the roles and responsibilities and service levels set forth by the Commonwealth. To support the on-going Chargeback system activities, we will utilize most of the current VITA staff supporting these efforts, lead by an experienced Northrop Grumman supervisor. The team that will build and deploy the new system will consist of Northrop Grumman and HP personnel with chargeback system and design expertise. These individuals will also provide the required insight into the current state-of-the-art in commercial chargeback methodologies, technology and products.

Policies, Procedures and Standards

Northrop Grumman's Chargeback Services will comply with the Commonwealth's current policies, procedures, standards and regulatory compliance requirements. Northrop Grumman realizes that VITA chargeback policies and methodologies are regulated by, and are in keeping with, the Federal Office of Management and Budget Circular A-87, revised 5/10/04, as amended or superseded. Each year the Northrop Grumman Team will work with VITA in preparing a Cost Allocation Plan, which describes in detail VITA's compliance to this policy.

Current Projects

The Commonwealth currently has a number of chargeback-related projects planned or in progress. Northrop Grumman will assume responsibility to complete them within the time frames specified by Commonwealth; in so far as they do not conflict with new directions and/or solutions and/or schedules that are agreed to with the Commonwealth for the orderly development and deployment of the new Chargeback system. A list of these current projects is provided in Schedule 28.29 (Current Projects).

8.3 Chargeback Management and Invoicing Services

The Northrop Grumman Team will provide the products, processes and services to deliver the solution for VITA's Chargeback Services. The Commonwealth's best practice for the Chargeback system is to follow a planned assessment and phased approach to ensure complete success. The data gathered from the due diligence and the Draft Chargeback Services Requirements

Document has not provided our Team with sufficient information to effectively plan, design and implement a service that will be "best of class" for the Commonwealth. As a result the following provides our approach to work with the Commonwealth in establishing a services-oriented solution based on our methodologies and best practices.

Approach

Integrated Service Management (ISM) is an "end to end" hardware and software requirements analysis and design methodology for adding and integrating new services. ISM handles all aspects of Service fulfillment, Service Assurance and Service Usage which conforms to Industry standards as enhanced Telecommunications Operation Map (eTOM) for business processes, Information Technology Infrastructure Library (ITIL) for Operational processes for Service Delivery and Service Support and Information Technology Service Management (ITSM) for people processes and tools.

ISM Principles

- Simplification, for reduced complexity and risk.
- Standardization, for improved speed and ease of change.
- Modularity, for increase flexibility and reduced impact upon systems integration and functionality
- Integration, for enabling true business agility with ease, because change is inevitable

Service lifecycles used to be measured in years, or at least months. Today, service lifecycles may include a vast range of timeframes which might be measured in weeks, days, or even hours. The tremendous challenge of provisioning, assurance and billing for both long and short duration services across various entities demands robust tools that ISM provides.

The architecture of ISM is designed to accommodate the increasingly rapid pace of service offerings and lifecycles and offers a set of flexible, adaptive tools that anticipate future needs. With this in mind, the Northrop Grumman Team will work with VITA to analyze their existing environment and both current and anticipated needs, and will then define a realistic, workable roadmap for today's requirements and future expansion and/or migration to suitable components.

By moving from proprietary to open standards, ISM takes advantage of a common exchange and information model, which allows new services and products to be more rapidly implemented. These efficiencies translate directly into immediate and significant cost savings and increased customer satisfaction.

System Migration and Deployment Plan

This plan sets forth the activities necessary for the logical migration of the responsibility for providing Chargeback Services from VITA to Northrop Grumman (Migration and Deployment Plan). Within 5 days after the commencement date, a detailed migration and deployment plan will be prepared by a team of Northrop Grumman and VITA personnel ("Migration and Deployment Team"). The detailed Plan will describe:

- Goals, expectations and specific objectives of each portion of the plan
- Technical assumptions and dependencies inherent in the plan
- All variances between VITA facilities
- Timeliness, activity dates and people responsible for individual tasks throughout the migration and deployment period

Our corporate system development methodology is

The migration plan will be the control mechanism for determining the migration of responsibilities and it will contain descriptions and schedules for the required tasks. The focus of the migration plan activities are to ensure that the service is transferred smoothly to Northrop Grumman with minimal disruption to VITA operations.

based on Project Management Institute (PMI) standards and provides checks and balances to ensure that the Migration and Deployment Plan will be done on-time and within cost.

Upon completion of the detailed migration and deployment plan, the migration and deployment team will meet weekly, or as otherwise mutually agreed, and will review and update the plan to reflect changes such as revisions to schedules, resource requirements, dependencies, and priorities, and it will summarize the progress on plan activities to date.

8.3.1 Roles and Responsibilities

Northrop Grumman Team Responsibilities

Northrop Grumman, with VITA's cooperation, is responsible for developing and implementing the migration and deployment plan. Responsibilities include establishing a migration and deployment project office, management of, at a minimum, weekly migration and deployment status meetings and the tracking of all tasks. Northrop Grumman will provide regular updates to VITA management describing the following:

- Activities scheduled during the current reporting period
- Activities planned for the next reporting period
- Change control activities

VITA Responsibilities

VITA will be required to assign personnel to the migration and deployment team to assist Northrop Grumman in implementing the migration and deployment plan. VITA will provide the required resources as determined by the migration and deployment plan necessary to perform its responsibilities, including:

The allocation of Northrop Grumman and VITA responsibilities, roles and resources into a unified Migration and Deployment Team will ensure that:

- Legacy information will be represented in our design
- Best Practices experience will be shared with entire team
- Requirements will represent VITA's "real" needs
- Organizational interfaces will be clearly defined and well managed
- Operations plans will take into consideration the practicality of their implementation

- Appropriate personnel working with Northrop Grumman to develop individual plan chapters and identify the tasks needed to complete each major service area migration
- Representation and input from the end-user organizations who will be required to assist in defining the criteria for the operations migration portions of the plan. This will facilitate the migration of VITA's application processing functions to Northrop Grumman
- Access for Northrop Grumman personnel to the facilities and systems affected as a result of the migration
- Current, detailed data on facilities, hardware/software/network configurations and inventory data related to the migration
- Identification of all current and future known projects

- All required documentation related to the migration (i.e., third party services, existing processes and procedures, systems documentation, etc).

8.3.2 Chargeback System Development and Support

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8.4 Exclusions

Redacted from Public Document – Proprietary and Confidential

8.5 Service Specific Milestones

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8.6 Service Management

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8.7 New/Replacement Chargeback System Requirements

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8.7.1 Objectives

Northrop Grumman understands that the current Chargeback and invoicing systems currently in use are:

- Computer Services Billing System—CSBS
- Telecommunications Inventory Billing System—TIBS
- Manpower Accounting and Control System—MACS
- Miscellaneous Billing System—MBS
- Direct Billing System—DBS
- VITA is currently exploring a short-term solution for billing shared services

The objectives of the new chargeback environment are to:

- Collect, consolidate, and store the current billing information to a single database
- Allow for data collection from a variety of sources
- Provide a single location for maintaining rates and eligible customer profile information
- Allow queries for data analysis
- Provide a Web-based invoicing and reporting feature with the ability to drill-down to detail information, such as job, transaction, Eligible Customer, and similar core data

As VITA has suggested, Northrop Grumman is not proposing at this time to eliminate existing systems whose functions include billing and invoicing as part of a larger function. Only the

invoicing portion of those systems would be transferred to the new system. However, as we and VITA evolve the fully detailed system requirements, this approach may be modified as needed.

8.7.2 General Requirements

Northrop Grumman will provide a replacement Chargeback System that will adhere to all requirements defined in Appendix X to Schedule 3.3 of the Comprehensive Services Agreement, Chargeback Services Requirements.

The system will provide the following capabilities and services:

1. Collect and process resource usage data from a variety of systems platforms
2. Store chargeback data
3. Provide drill down capabilities to eligible customers from the reports
4. Provide historical data to VITA for research and analysis
5. Provide resource usage and accounting for all appropriate Commonwealth systems technologies, using cost-effective methods
6. Accept input from external sources to be included in a single database for processing and producing invoices, which can be generated and presented in both online and in hard-copy formats
7. Accommodate special Eligible Customer requests for extracted information (e.g., extract files for the Eligible Customer to retrieve or create files to FTP to the eligible customer)
8. Provide the ability to interface with other business systems to bring information in and to pass information out (e.g., telecommunication billing, manpower information, PeopleSoft Account Receivable, VITA's planning and forecasting systems)

8.7.3 Data Capture Requirements (Mainframe)

The new replacement Chargeback System will provide the following capabilities and services chargeback of mainframe environments:

1. Collect and process chargeback data from all VITA's current releases of IBM and Unisys mainframe operating systems that produce log files. These include SMF, IMS log or Boole & Babbage Mainview for IMS, Adabas command log. It will be able to run under or interface with the OS/390 or Z/OS environment. Must provide interfaces for OS/390, Z/OS, CICS, DB2, ADABAS, DASD.
2. Include interface for Roscoe and COMPLETE. Will provide chargeback for DASD including SMS migration and back-up storage. Will interface with Boole & Babbage Mainview for IMS.
3. The Chargeback System will have the capability to check for duplicate input data, days out of sequence, or missing data. Will include checks for invalid data fields such as excessive or unreasonable resource utilization.
4. Will support VITA's current IBM and Unisys billable units of measure which are: disk storage space (DASD data is collected with DCOLLECT), tape storage (tape data is collected from TMS), tape seconds (I/Os), CPU time, local print lines, remote print lines, and transactions.
5. Include ability add or change the billable units of measure.

6. Capture the following data from the log files in order to identify the various mainframe jobs/sessions for each technology:
   a. Unisys Host-ID, Logon-ID, Job-name
   b. CICS System-ID, Logon-ID, Applid, Trans-ID
   c. ADABAS System-ID, Complete-ID, Region-ID
   d. MVS System-ID, Job-no, Job-name
   e. Roscoe System-ID, Logon-ID, Region-ID
   f. IMS System-id, IMS-ID, Lterm, Trans-code, Program-name, Logon-ID
   g. Mapper Host-ID, Mapper-ID, Logon-id, Type, Rid
7. Include an account code structure with a minimum of three reporting levels and at least a ten digit account number. Including a method for tracking account code updates, including date/time updated and customer ID of customer who performed the update.
8. System will integrate with all VITA chargeback systems for services such as consulting, systems development, rental of meeting rooms, etc. and will allow for alternate account code formats and invoicing at multiple organizational levels.
9. Provide a central rate table that is easy to change/maintain. The table will allow for resource code, resource description, resource rate, setup date, and any other related data. Including rates per lowest unit of measure, per thousand or other determined number, and flat fees. A history of rate changes will be maintained including a date-time stamp of the change.
10. Provide the capability to apply complex algorithms to resource data in determining the final charge. Component parts of the algorithm will be retained so that the final charge can be reconstructed or recalculated, for example if a factor or rate is to be changed.

8.7.4 Data Capture Requirements (Distributed Systems – UNIX, Windows)

The new replacement Chargeback System will provide the following capabilities and services chargeback for distributed systems with UNIX and Windows environments:

1. Collect and process chargeback data from all VITA's current releases of distributed systems that produce log files, such as UNIX, SOLARIS, and Microsoft platforms. These systems produce computer usage data from Networks, Internet Servers, Proxy Servers, Firewalls, Nodes, E-mail Systems, Switchers, Routers, Print Servers, Disk Allocation, ERP systems, Backup and Recovery Systems (EBARS).
2. Provide the ability to normalize CPU time due to the various speeds of UNIX and Windows operating systems.
3. Collect and analyze resource usage across the network customers such as CPU Time, Window Time, Eligible Customer sessions, Database usage (Oracle, DB2, MS SQL 2000, etc)., and others.
4. Provide capability for chargeback of resources in a shared UNIX and Windows environment.

8.7.5 Processing Requirements

The new replacement Chargeback System will meet the following processing requirements:

1. Provide the capability to normalize CPU times between mainframes of different processing speeds, so that the same charge will be produced for identical jobs run on processors with different speeds.
2. Provide for discounts for processing during off-shift, weekends, and holidays.
3. Provide the capability for applying surcharges or discounts for printing on special forms.
4. Create a relational database that will be the common repository of all the chargeback data from all systems. This database must reside on a mainframe, Windows, or UNIX platform.
5. Provide interval accounting for long-running jobs such as started tasks, so that parts of the job can be charged in the shift in which they were run. Also, this will allow part of a job to be charged if it has not completed at month-end.
6. Retain incomplete accounting records such as records with missing account codes. Allow reprocessing of records once corrections have been made.
7. Process credits, debits and miscellaneous transactions in an on-line real-time fashion. This on-line subsystem must be able to process credit requests for current and previous billing monthly periods, for any of the computer resources. This subsystem should allow VITA administrators to input a detailed explanation of these credits/debits/miscellaneous transactions. Also, allow charging of miscellaneous items such as consulting, one-time hardware or software purchases, and rental of equipment and meeting rooms. Allow entry of recurring flat charges.
8. Import files from external sources, such as PeopleSoft financials, asset management systems, manpower reporting systems, or telecommunications billing systems.
9. Produce data files with accounting data to interface with other financial systems such as accounts payable and accounts receivable.
10. Provide for transfer of data between various platforms including mainframes and distributed systems using FTP or another method.
11. Provide Eligible Customers with timely access to chargeback data, preferably by the day after the resource utilization has occurred.
12. Provide an on-line interface (preferably a GUI) for inputting and updating of data fields used to match data to account codes. As an example, CICS log on IDs and applids are used to determine account codes for CICS transactions.

8.7.6 Reporting Requirements

The new replacement Chargeback System will meet the following reporting requirements:

1. Support Internet/intranet processing for Eligible Customers to request and display their reports, and perform drill-down capabilities to the lowest level of chargeback data, from the Eligible Customer's desktop or browser. The drill-down capabilities should be supported by the eligible customer's selection criteria (example: ADABAS might be System-ID, Complete-ID, or Region-ID).
2. Produce detail reports, MTD/YTD summary reports, spreadsheets, graphics, reports in HTML format, and any other custom reports. The Chargeback System must interface with reporting products such as Crystal Reports.

3. Produce reports showing customer usage and charges at detailed and summary levels. Detailed information such as job names, transaction codes, applids, and user IDs should be available for reporting. Produce summary reports by account code, customer, resource, platform or technology, etc.
4. Provide data to produce a customized invoice with usage and charges by eligible customer. State requirements dictate a standard invoice format known as the Interagency Transfer of funds (IAT).
5. Provide year-to-date reporting showing usage and charges by the eligible customer.
6. Provide the capability to collate printed reports by Eligible Customer.
7. Provide ad hoc reporting to allow VITA staff to answer eligible customer inquiries. The reporting system should be eligible customer-friendly to allow non-technical personnel to produce reports. Describe your product's ad hoc reporting capability.